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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:	Swain <i>et al.</i>	Confirmation No.:	9609
Application No.:	10/647,071	Art Unit:	1639
Filed:	August 22, 2003	Examiner:	Steele, Amber D.
For:	HAPTEN-CARRIER CONJUGATES FOR USE IN DRUG-ABUSE THERAPY AND METHODS FOR PREPARATION OF SAME	Attorney Docket No.:	11662-003-999

DRAFT PROPOSED AMENDMENTS TO THE CLAIMS

This Listing of the Claims will replace all prior versions, and listings of the claims in the application.

Listing of the Claims:

1.-124. (Canceled)

125. (Currently Amended) A pharmaceutical composition comprising a hapten-carrier conjugate, said pharmaceutical composition comprising

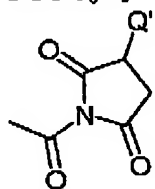
at least one hapten which is nicotine or a nicotine derivative; and

at least one carrier which is a pseudomonas exotoxin,

and wherein said hapten and said carrier are linked by a branch selected from the group of chemical moieties identified by CJ reference number consisting of:

CJ-0	Q
CJ-1	$(CH_2)_nQ$
CJ 1.1	CO_2Q
CJ 2	$OCO(CH_2)_nQ$
CJ 2.1	$OCOCH=Q$
CJ 2.2	$OCOCH(O)CH_2$
CJ 2.3	$OCO(CH_2)_nCH(O)CH_2$

CJ 3	$\text{CO}(\text{CH}_2)_n\text{COQ}$
CJ 3.1	$\text{CO}(\text{CH}_2)_n\text{CNQ}$
CJ 4	$\text{OCO}(\text{CH}_2)_n\text{COQ}$
CJ 4.1	$\text{OCO}(\text{CH}_2)_n\text{CNQ}$
CJ 5	$\text{CH}_2\text{OCO}(\text{CH}_2)_n\text{COQ}$
CJ 5.1	$\text{CH}_2\text{OCO}(\text{CH}_2)_n\text{CNQ}$
CJ 6	$\text{CONH}(\text{CH}_2)_n\text{Q}$
CJ 7	$\text{Y}(\text{CH}_2)_n\text{Q}$
CJ 7.1	$\text{CH}_2\text{Y}(\text{CH}_2)_n\text{Q}$
CJ 8	$\text{OCOCH}(\text{OH})\text{CH}_2\text{Q}$
CJ 8.1	$\text{OCO}(\text{CH}_2)_n\text{CH}(\text{OH})\text{CH}_2\text{Q}$
CJ 9	OCOC_6H_5
CJ 10	



, wherein Q' is a modified

protein;

CJ 11	$\text{YCO}(\text{CH}_2)_n\text{COQ}$; and
CJ 11.1	$\text{CH}_2\text{YCO}(\text{CH}_2)_n\text{COQ}$,

and wherein for each branch, n is independently an integer; Y is S, O, or NH; and Q is selected from the group consisting of:

- (i) —H;
- (ii) —OH;
- (iii) —CH₂;
- (iv) —CH₃;
- (v) —OCH₃;
- (vi) —COOH;
- (vii) a halogen;
- (viii) an activated ester or esters, such as 2-nitro-4-sulfohenyl ester and N-oxysuccinimidyl ester;
- (ix) a group or groups reactive toward the carrier, such as a mixed anhydride, acyl halide, acyl azide, alkyl halide, N-maleimide, imino ester, isocyanate, and isothiocyanate;
- (x) the carrier; and

(xi) another "branch" identified by its "CJ" reference number,
and wherein said hapten-carrier conjugate elicits nicotine-specific antibodies in a human.

126. (Previously Presented) The pharmaceutical composition of claim 125, wherein n is from 3 to 20.

127. (Canceled)

128. (Previously Presented) The pharmaceutical composition of claim 125, wherein greater than one hapten is coupled to the carrier.

129. (Canceled)

130. (Canceled)

131. (Previously Presented) The pharmaceutical composition of claim 125, further comprising a pharmaceutically acceptable excipient.

132. (Presently Amended) The pharmaceutical composition of claim 125, further comprising an adjuvant.

133. (Previously Presented) The pharmaceutical composition of claim 132, wherein the adjuvant is alum or RIBI adjuvant.

134. (Previously Presented) The pharmaceutical composition of claim 133, wherein the adjuvant is alum.

135. (Previously Presented) The pharmaceutical composition of claim 134, wherein the alum is aluminum hydroxide or aluminum phosphate.

136. (Previously Presented) The pharmaceutical composition of claim 125, further comprising an auxiliary agent or supplementary active compound.

137. (Previously Presented) The pharmaceutical composition of claim 125 which is suitable for parenteral administration to a human.

138. (Previously Presented) The pharmaceutical composition of claim 125 which is suitable for oral, dermal or topical administration to a human.

139. (Canceled)

140. (Canceled)

141. (Canceled)

142. (Previously Presented) The pharmaceutical composition of claim 125, further comprising a pharmaceutically acceptable excipient.